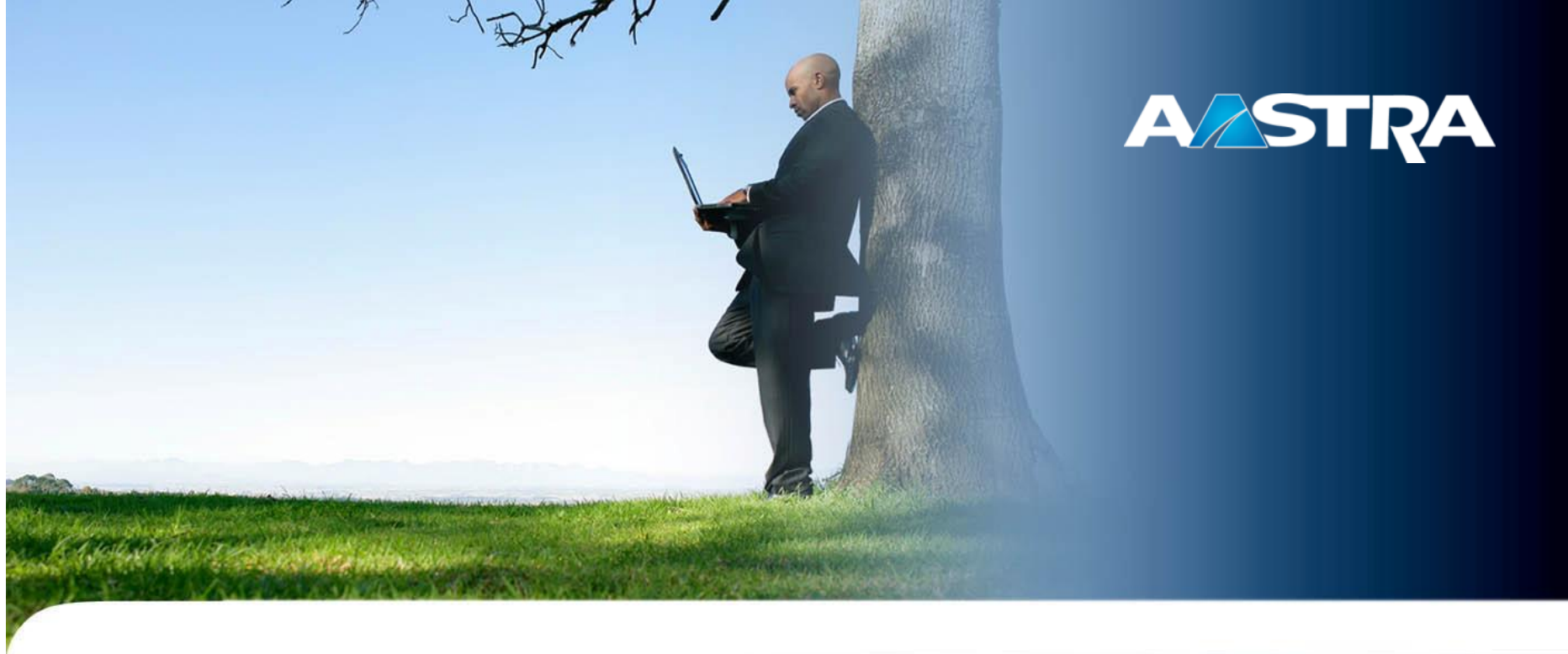




Aastra XML API

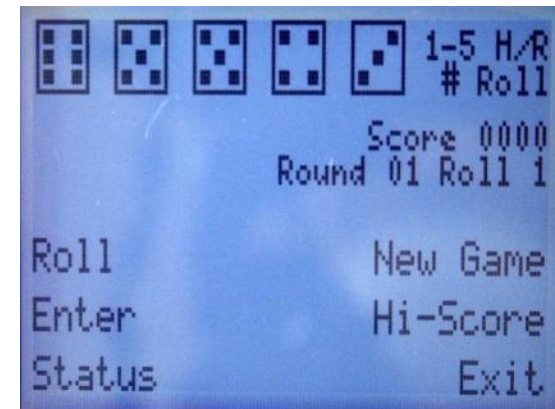
Unleash the power of your Aastra SIP Phone



<?xml?>

- ✧ Who is Aastra ?
- ✧ A full range of SIP terminals (XML Inside)
- ✧ A SIP DECT offer
- ✧ What is the XML API?
- ✧ What type of applications?
- ✧ Aastra Resources
 - XML API SDK
 - Demo Applications
- ✧ Telephony applications : PBX integration
- ✧ Deployment/Provisioning : Self-Configuration
- ✧ Media Applications : RSS feeds, Web Services
- ✧ Vertical Applications
- ✧ Misc Applications : Emergency Broadcast
- ✧ Conclusion

<?xml?>



- ✧ Headquarters in Concord, Canada
- ✧ Company, founded in 1983
- ✧ Global reach – more than 50 million lines around the world



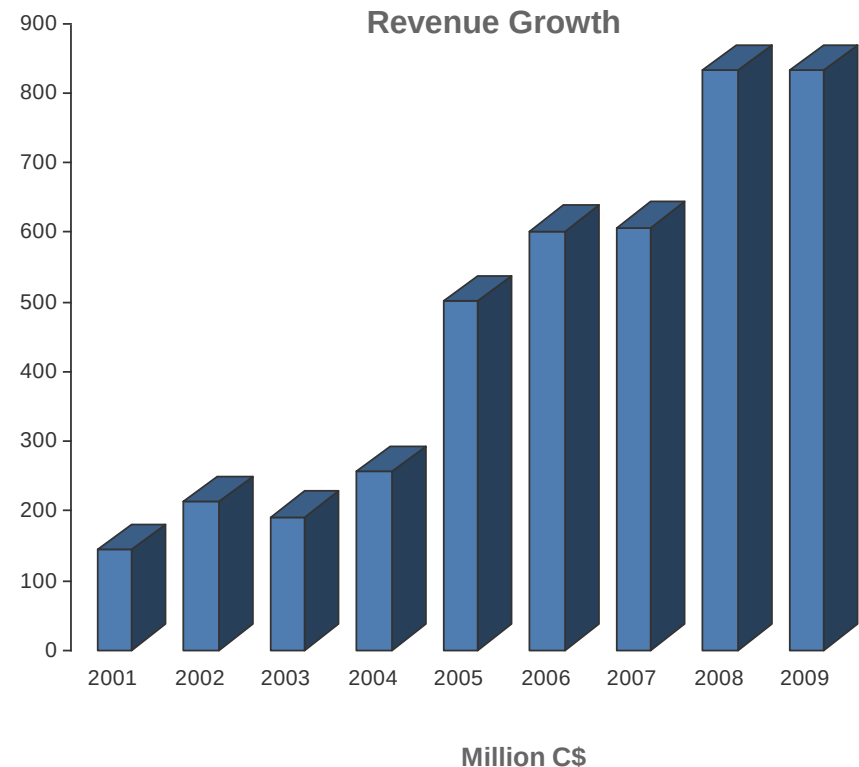
★ Listed on the Toronto Stock Exchange (T:AAH)

★ Strong balance sheet

- Cash – Positive
- Strong cash flow

★ Profitable

- Q4 2009 was Aastra's 47th consecutive positive quarter,
- Revenue: C\$ 832 million in 2009



What makes us different...

- ✧ Truly embracing open standards
 - Investment protection
 - Cost effective migration
- ✧ Global reach with local flavours
 - Choice for our customers
 - Responsive & Flexible
- ✧ Strong financial fundamentals



A full range of SIP terminals : Aastra 67xxi



6731i

Low range



6730i



6755i

Middle range



6753i



6739i

High Range



6757i

- ✧ Large 5.7, Full VGA (640x480) Color Touch Screen LCD
- ✧ Adjustable screen brightness for user
- ✧ **Intuitive graphical user** interface and navigation menu
- ✧ Integrated Gigabit Ethernet and **bluetooth support**
- ✧ **Built-in USB port**
- ✧ Aastra Hi-Q Audio™ Technology
- ✧ Connected : RJ jack, EHS/DHSG port
- ✧ **Up to 9 lines with call appearances and multi-proxy**
- ✧ **Up to 55 programmables softkeys** & 14 dedicated hard keys :
- ✧ Voice messages, Transfer, Conference, directory, call list, Hold, redial, Mute...
- ✧ Distinctive ringing, priority alerting
- ✧ Interface call list:
- ✧ Call forward, call transfer, call waiting, call timer
- ✧ Caller and calling line information
- ✧ Caller list incoming and outgoing, missed call notification
- ✧ Downloadable language pack support
- ✧ XML support for productivity





★ Picture ID – You can see incoming or outgoing caller

- available for incoming & outgoing call
- Caller list
- Redial & directory
- Icon for status for caller



★ Touch keyboard on screen

- Delete and add information on the phone
- Complet directory, personal information, configuration, application, navigation...

★ Expansion & Connectivity

- Expansion modules M670i and M675i available (up to 3)
- 2 ports Ethernet Gigabyte (LAN and PC)
- Integrated IEEE 802.3af PoE
- Support protocol for many environment



★ Audio

- Technology Aastra Hi-Q Audio™
- Full –duplex SOFT + Hard : Handset, speaker full duplex and headset port
- Multi options of connection headset : Jack, DHSG, Bluetooth
- Voice Quality Metrics
- Codecs: G.711 μ -law / A-law, G.729, G.722 wideband



SIP sets : Aastra 673xi series



6730i

- ✧ **Design based on 675xi**
- ✧ 3 lines LCD screen
- ✧ 8 programmable top keys with LEDs
- ✧ 1 Ethernet port
- ✧ AC power adapter (not Power over Ethernet : PoE)
- ✧ Full duplex speakerphone for handsfree calls
- ✧ 2 line/call appearance keys with LEDs for L1 & L2
- ✧ 4 navigation keys
- ✧ Dedicated keys for : transfer, conference, hold, redial, mute
- ✧ Headset in place of handset
- ✧ Same software than 675xi sets : same functions than 675xi sets.
- ✧ DHSG compatibility for headset



6731i

- ✧ **Design based on 675xi**
- ✧ 3 lines LCD screen
- ✧ 8 programmable top keys with LEDs
- ✧ Built-in 2 ports Ethernet switch
- ✧ PoE (based on 802.3af standard), AC power adapter (optional equipment, not included)
- ✧ Full duplex speakerphone for handsfree calls
- ✧ 2 line/call appearance keys with LEDs for L1 & L2
- ✧ 4 navigation keys
- ✧ Dedicated keys for : transfer, conference, hold, redial, mute
- ✧ Headset in place of handset
- ✧ Same software than 675xi sets : same functions than 675xi sets.
- ✧ Incoming call log (200)
- ✧ Outgoing call log (100)
- ✧ Class 1
- ✧ DHSG compatibility for headset



6739i

- ✧ **Large 5.7 , Full VGA (640x480) Color Touch Screen LCD**
- ✧ Adjustable screen brightness for user
- ✧ Intuitive graphical user interface and navigation menu
- ✧ Integrated Gigabit Ethernet and bluetooth support
- ✧ Built-in USB port
- ✧ Aastra Hi-Q Audio™ Technology
- ✧ Connected : RJ jack, EHS/DHSG port
- ✧ Up to 9 lines with call appearances and multi-proxy
- ✧ Up to 55 programmables softkeys & 14 dedicated hard keys :
- ✧ Voice messages, Transfer, Conference, directory, call list, Hold, redial, Mute...
- ✧ Distinctive ringing, priority alerting
- ✧ Interface call list:
- ✧ Call forward, call transfer, call waiting, call timer
- ✧ Caller and calling line information
- ✧ Caller list incoming and outgoing, missed call notification
- ✧ Downloadable language pack support
- ✧ XML support for productivity en

SIP sets : Aastra 675xi series

6751i



- * LCD screen – 3 lines (not backlighted)
- * Speed dialing on the alpha key board
- * Speaker phone
- * Amplified Listening/ Call answer without picking up the handset / Handsfree
- * Management of ringing melodies (choice and volume)
- * Incoming call log (200)
- * Outgoing call log (100)
- * Personalized directory (200)
- * Wallmounting position
- * Web Interface for configuration
- * PoE (IEEE 802.3af) capability
- * Switch 2 ports 10/100 Ethernet (1 for the PC, 1 for the Lan)

6753i



- * LCD screen – 3 lines (not backlighted)-XML management
- * 3 Lines- Up to 9 lines support
- * 6 programmable keys
- * Speaker phone
- * Amplified Listening/
- * Écoute amplifiée/ Call answer without picking up the handset / Handsfree
- * Management of ringing melodies (choice and volume)
- * Incoming call log (200)
- * Outgoing call log (100)
- * Personalized directory (200)
- * Headset jack
- * Wallmounting position
- * Web Interface for configuration
- * PoE (IEEE 802.3af) capability
- * Switch 2 ports 10/100 Ethernet (1 for the PC, 1 for the Lan)
- * Full duplex speaker phone

6755i



- * LCD screen –8 lines -6 virtual keys (backlighted)-XML management
- * 4 Lines- Up to 9 lines support
- * 6 programmable keys
- * Speaker phone
- * Amplified Listening/
- * Écoute amplifiée/ Call answer without picking up the handset / Handsfree
- * Management of ringing melodies (choice and volume)
- * Incoming call log (200)
- * Outgoing call log (100)
- * Personalized directory (200)
- * Headset jack
- * Wallmounting position
- * Web Interface for configuration
- * PoE (IEEE 802.3af) capability
- * Switch 2 ports 10/100 Ethernet (1 for the PC, 1 for the Lan)
- * Full duplex speaker phone

6757i



- * LCD screen –11 lines XML management (backlighted)
- * 4 Lines- Up to 9 lines support
- * 12 softkeys : 6 static programmable up to 10 functions - 6 context sensitive programmable up to 20 functions
- * Speaker phone
- * Amplified Listening/
- * Écoute amplifiée/ Call answer without picking up the handset / Handsfree
- * Management of ringing melodies (choice and volume)
- * Incoming call log (200)
- * Outgoing call log (100)
- * Personalized directory (200)
- * Headset jack
- * Wallmounting position
- * Web Interface for configuration
- * PoE (IEEE 802.3af) capability
- * Switch 2 ports 10/100 Ethernet (1 for the PC, 1 for the Lan)
- * Full duplex speaker phone

Expansion Modules for Aastra 67xxi Series



M670i

Flexibility

2 expansion modules
scalable up
to 3 modules per phone



M675i

Models	M670i	M675i
6753i	•	
6755i	•	•
6757i	•	•
6739i	•	•



SIP DECT

Mobility solution

✧ DECT Over SIP

- DECT
- Users are provisioned as regular SIP extensions
- Enterprise class Handset
- Indoor Access Point (RFP 32)
- Outdoor Access Point (RFP 34)
- 300 sq. meters coverage area (open space)
- Seamless handover between cells
- Intracell or intercell handover
- Digital quality - automatic best channel selection
- DECT Power Management (12 hours talk time/120 hours standby)
- DECT Authentication/Encryption



✧ Scalability

- Up to 256 Access Points
- Up to 512 registered Handsets

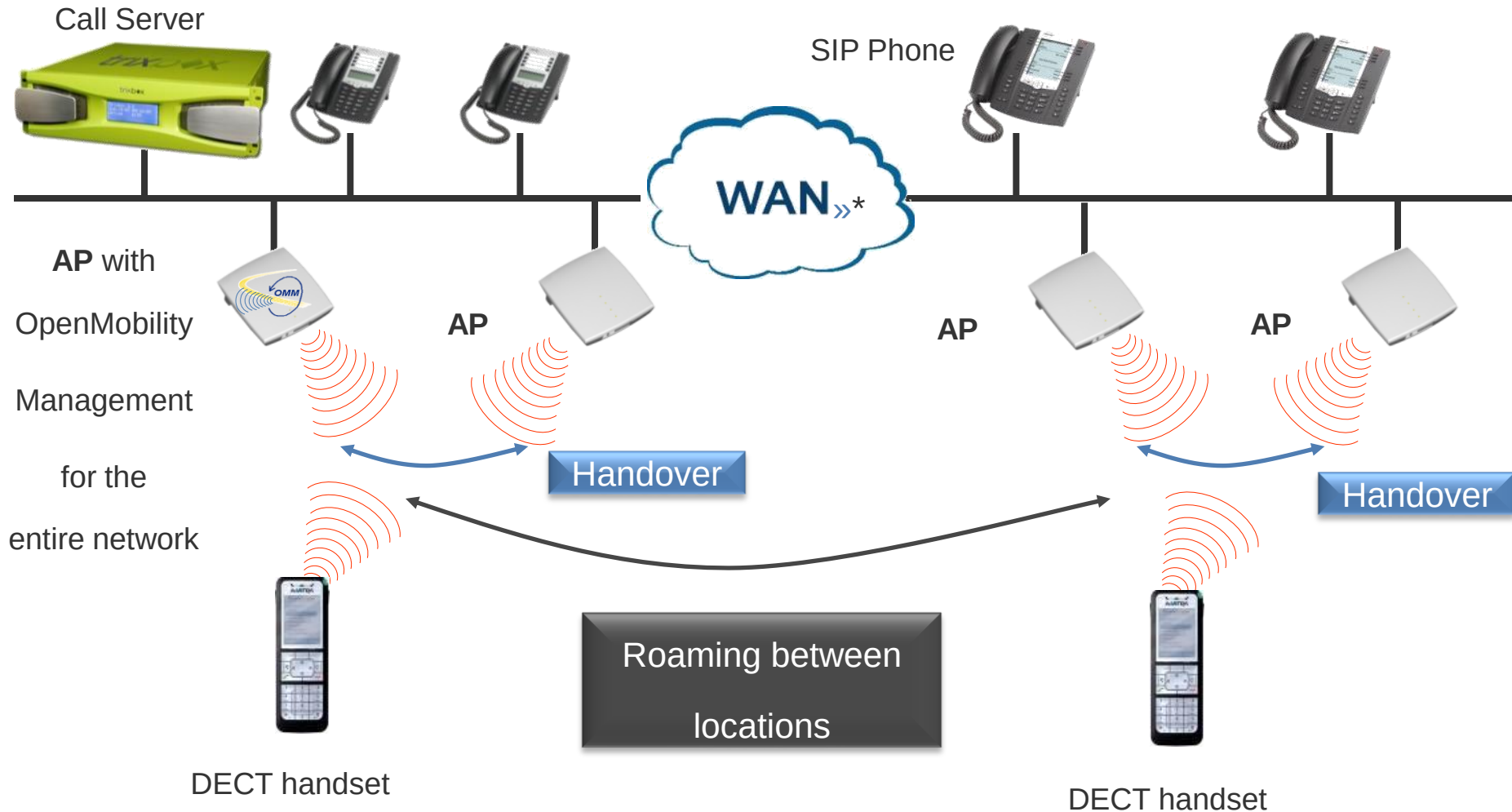
✧ Roaming between different offices / locations over WAN

✧ No PBX required in the remote offices / locations

✧ Size of the mobility network depends on the IP-infrastructure only



Aastra SIP-DECT™ Overview



* Might require VPN tunnel or a SBC

DECT

Pros

- Designed for Voice
- Native handover intra and inter cells
- Digital quality
- Natively secured protocol
- High range and high density Access Points.
- Mature standard
- Robustness in noisy environment
- Easy deployment
- 1.9 GHz dedicated for DECT

Cons

- Just for voice

WiFi

Pros

- Shared with data access
- Pricing
- Ubiquity

Cons

- No native handover between cells
- Complex radio deployment
- Poor range
- WiFi security adds delay
- No power management, low battery life for handsets
- Crowded 2.4 GHz frequency

» Indoor DECT Access Point RFP32

- Internal Access Point
- Supporting 8 concurrent calls
- PoE powered
- Wall mounting screws & anchors
- Drilling template



» DECT A6xx dHandset s

- Rechargeable batteries
- Bluetooth interface (A620d & A630d)
- Belt clip
- Power adapter
- Charging cradle
- Quick guide



» Outdoor DECT Access Point RFP34

- Outdoor Access Point
- Supporting 8 concurrent calls
- 2 External dipole antennas
- PoE powered



» OMM Activation Kit

- OMM software
- AP Configuration tool
- Installation guide
- Handset Quick guide and User manual
- PARK key



More added value with XML

Using the Power of the IP Telephone!

All Aastra IP telephone have an XML Browser



What is Aastra XML API - eXtensible Markup Language

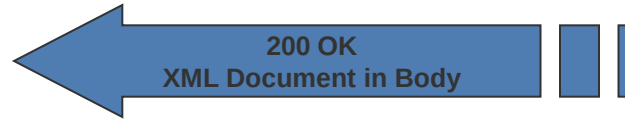


- ✧ Aastra SIP phones support an XML API transported by HTTP or HTTPS.
- ✧ XML is a light weight text markup language much like HTML but XML was designed to describe data and to focus on the content not the format.
- ✧ The XML applications can be triggered:
 1. User presses a XML key, the phone issues an HTTP (or HTTPS) GET command to the server, this works like a PC Browser (Microsoft Internet Explorer)
 2. An event occurs on the phone (end of boot, incoming call, outgoing call,...) and the phone performs a GET on a configured URI
 3. Server-initiated. An XML server can push info to the telephone either using HTTP or using a proprietary SIP Notify

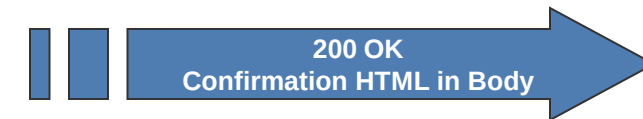
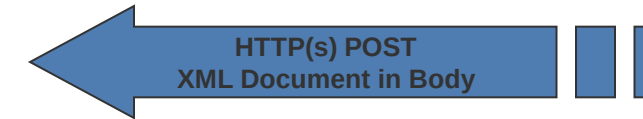
SIP Phone Client AND Server



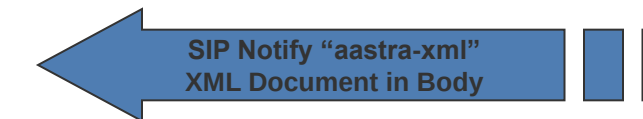
SIP Phone **Client**
requesting on TCP port 80 (or any port)



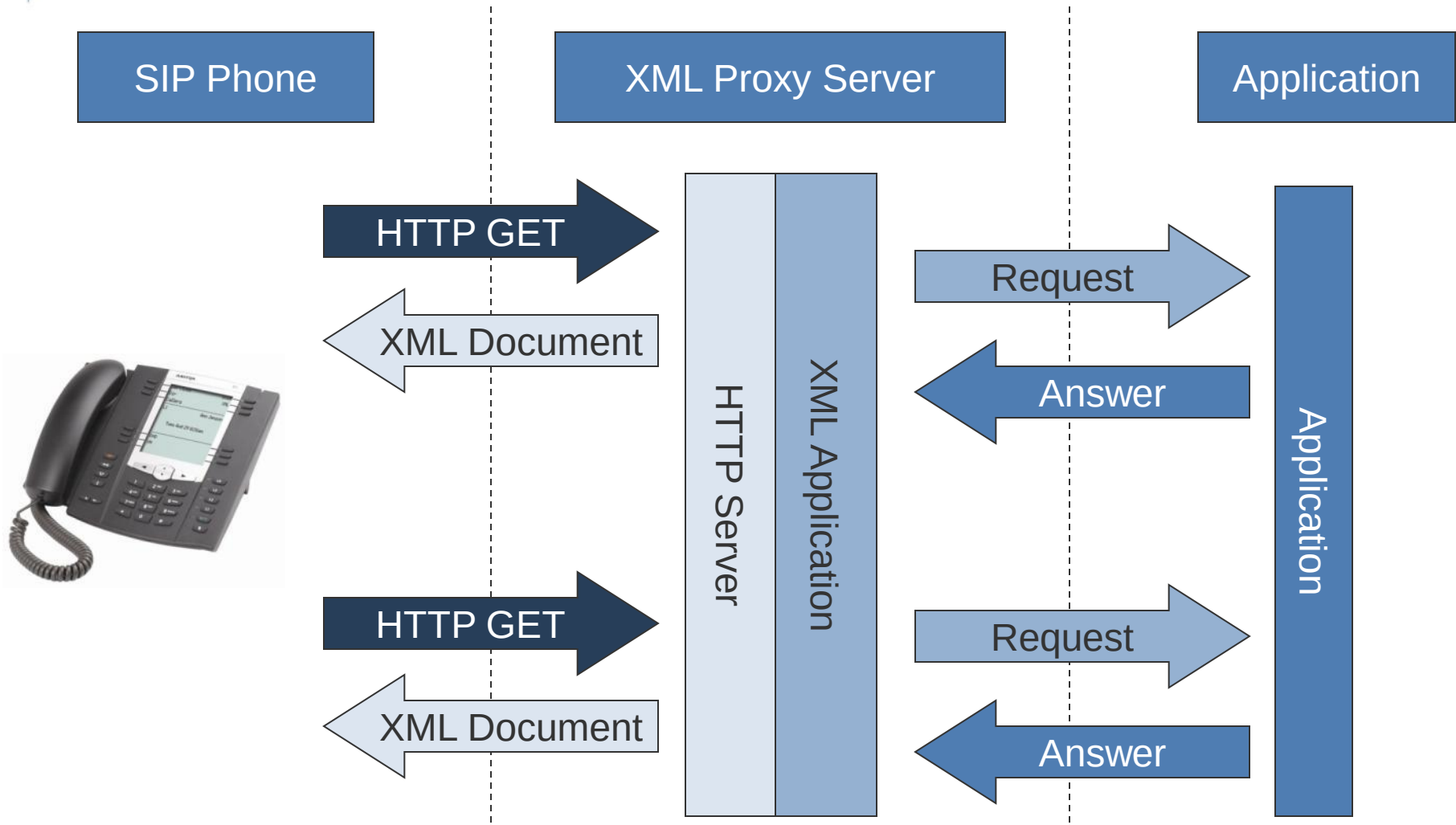
SIP Phone **Server**
listening on TCP port 80



SIP Phone **Server**
handling SIP Notify



The XML proxy Server



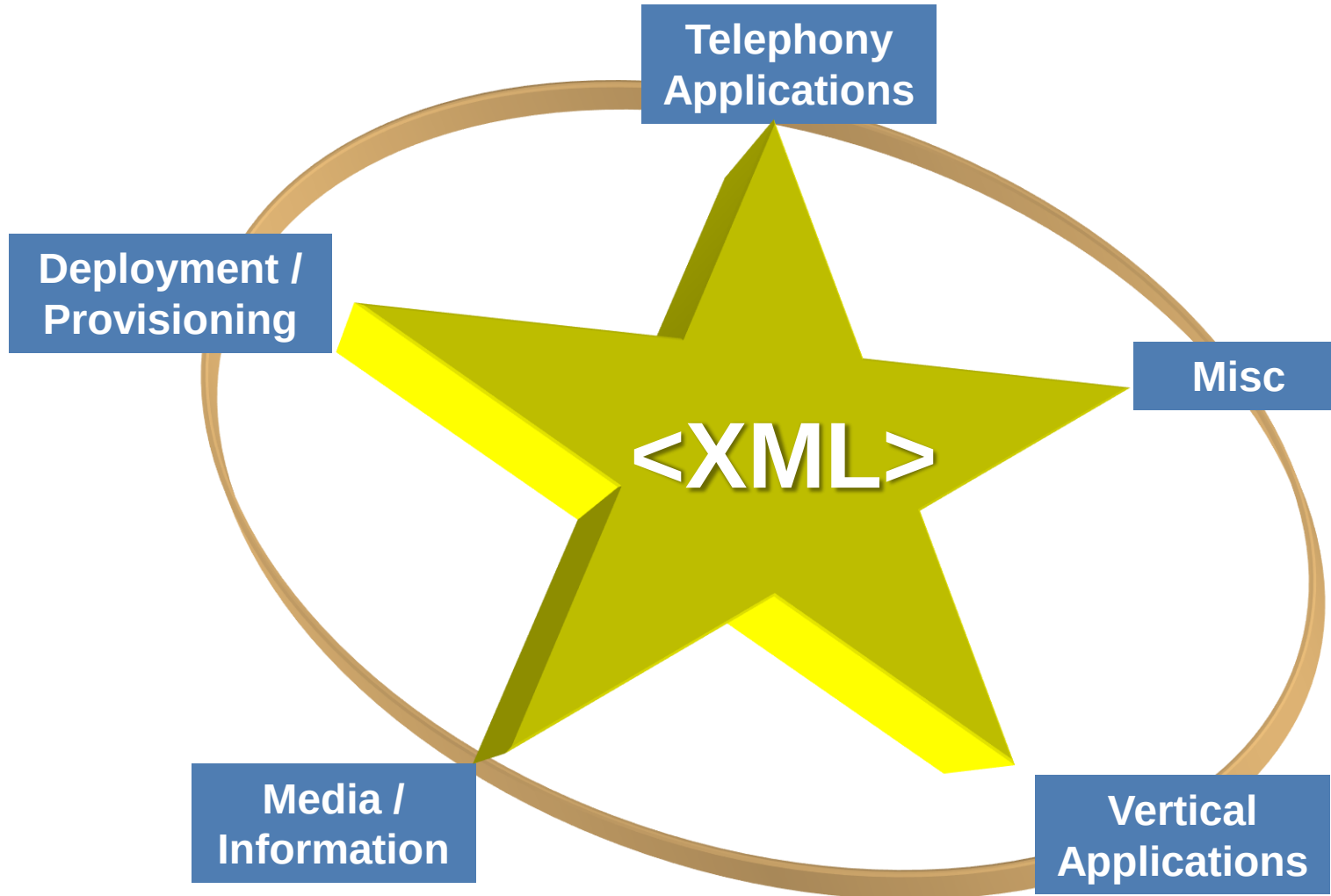
- ✧ Aastra provides, free of charge, a complete SDK (Software Development Kit) which includes
 - Detailed documentation
 - XSL description
 - PHP SDK
 - Sample source code (media apps, self-configuration, directory and simple Asterisk integration)
- ✧ Updated and published with each new firmware version with XML enhancements
- ✧ Latest version are 2.5.3 or 3.0.1 (6739i)
- ✧ Dedicated version also available for RP phones
- ✧ Available from www.aastratelecom.com

Free demo XML applications for Aastra SIP phones

 LABEL	DESCRIPTION	URI to configure
 World Clock	Current time	http://65.205.71.13/xml/clock/clock.php
 Horoscope	Weekly updated	http://65.205.71.13/xml/horoscope/horoscope.php
 ESPN feed	NBA, NFL, NHL	http://65.205.71.13/xml/rss/rss.php?feed=espn
 GoogleSearch engine		http://65.205.71.13/xml/google/google.php
 CNN feed,	Top stories,	http://65.205.71.13/xml/rss/rss.php?feed=cnn
 Movies New Releases		http://65.205.71.13/xml/rss/rss.php?feed=movies
 Today	Quote of the day	http://65.205.71.13/xml/rss/rss.php?feed=day
 Stock Quote	using yahoo.com	http://65.205.71.13/xml/stock/stock.php
 Weather	in North America	http://65.205.71.13/xml/weather/weather.php
 Area Code	Lookup	http://65.205.71.13/xml/area/area.php
 ...		

Check www.aastratelecom.com for the updated list

Source code available as open-source via Asterisk integration



Telephony Applications

<XML>

Directory Lookup
Presence
Visual Park/Pickup
Visual Voice Mailbox
Conference Manager
Server side DND/CFWD
Hot-Desking
Charging Info
Call Logs
...

Services Icom
Directory
Call Loss
Call loss
Placed
Received
Missed
All

Services Icom
Directory
Call Loss
Call Forward
Always
Busy
No Answer
Exit

Services My Profile
Directory
Call Loss
Click-to-Conference
Host (You)
Stephane Angelot
Yves Laliberte
John Drolet
Start Cancel
Add Drop
Exit

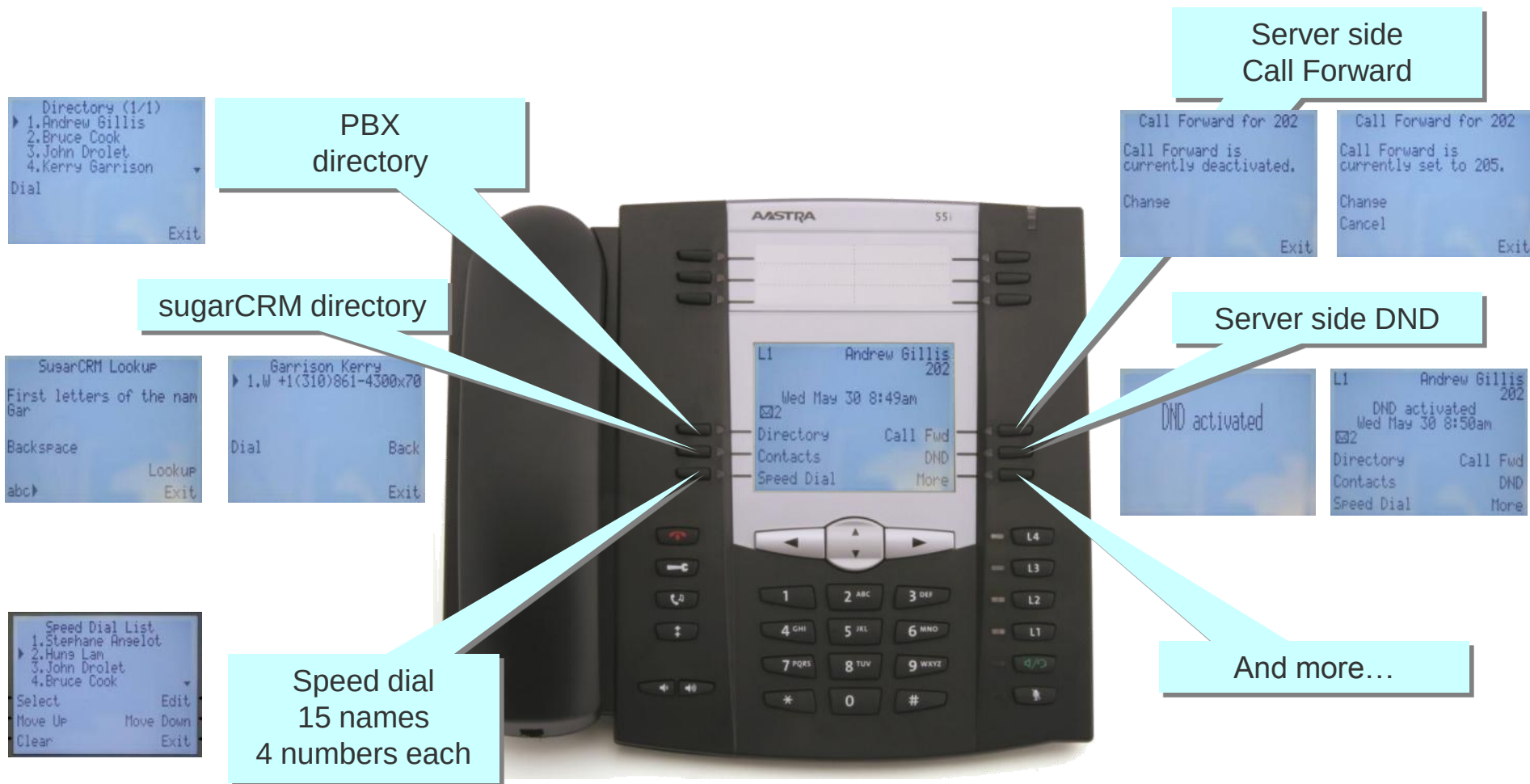
Telephony Applications

Integration with Asterisk/freePBX

- ✧ Available from www.aastratelecom.com for
 - Trixbox CE (included in the core package)
 - PBX in a Flash (installation script)
 - Elastix (installation script)
 - AsteriskNOW (installation script)
- ✧ All phones supported
- ✧ Provided as Open-Source under the LGPL license
- ✧ **NOT** supported by Aastra support but via respective forums as best effort
- ✧ Pretty popular
 - Outside trixbox CE, around 500 downloads/month worldwide
- ✧ Latest version 2.2.1 (April 2009), 5th version since 2007
 - In French, Spanish, German and Portuguese
- ✧ Asterisk 1.4 and 1.6 are supported
- ✧ FreePBX 2.5 - 2.7 is supported



Telephony Applications Integration with Asterisk/freePBX



Telephony Applications Integration with Asterisk/freePBX

Parked Calls
▶ 1.Kerry Garrison

Pickup Refresh

Exit

List/pickup parked calls

VoiceMail Access
Mailbox: 202
Password: *****

Backspace Cancel
Done

Visual VoiceMail

202 - New Msgs - (2)
Steven Grinzstein (207)
Kerry Garrison (205)

Select Delete
Chs Folder Exit

Kerry Garrison (205)
Friday 05/25/07
at 04:56:05 PM
Duration: 30s
Play Delete
Previous Back
Move

Ask Google

Ask Google
Enter your question
Aa 1581l

Backspace NextSpace
Help Ask
123▶ Exit

Ask Google
27 May 07 AA 1581 SAT
Depart: 12:20 Departed
Gate: T2/36 LAX
Back
Exit



Local Weather

Local Weather
Enter ZIP code
02110
Backspace Cancel
Done

Boston, Massachusetts We
oCurrently
oToday
oTonight
oThursday
Select
Back Done

Tonight
Partly cloudy in the
evening. Then becoming
mostly cloudy. Lows in
Previous Next
Done

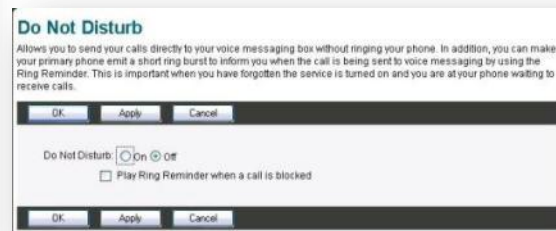
Telephony Applications

Integration with Asterisk/freePBX

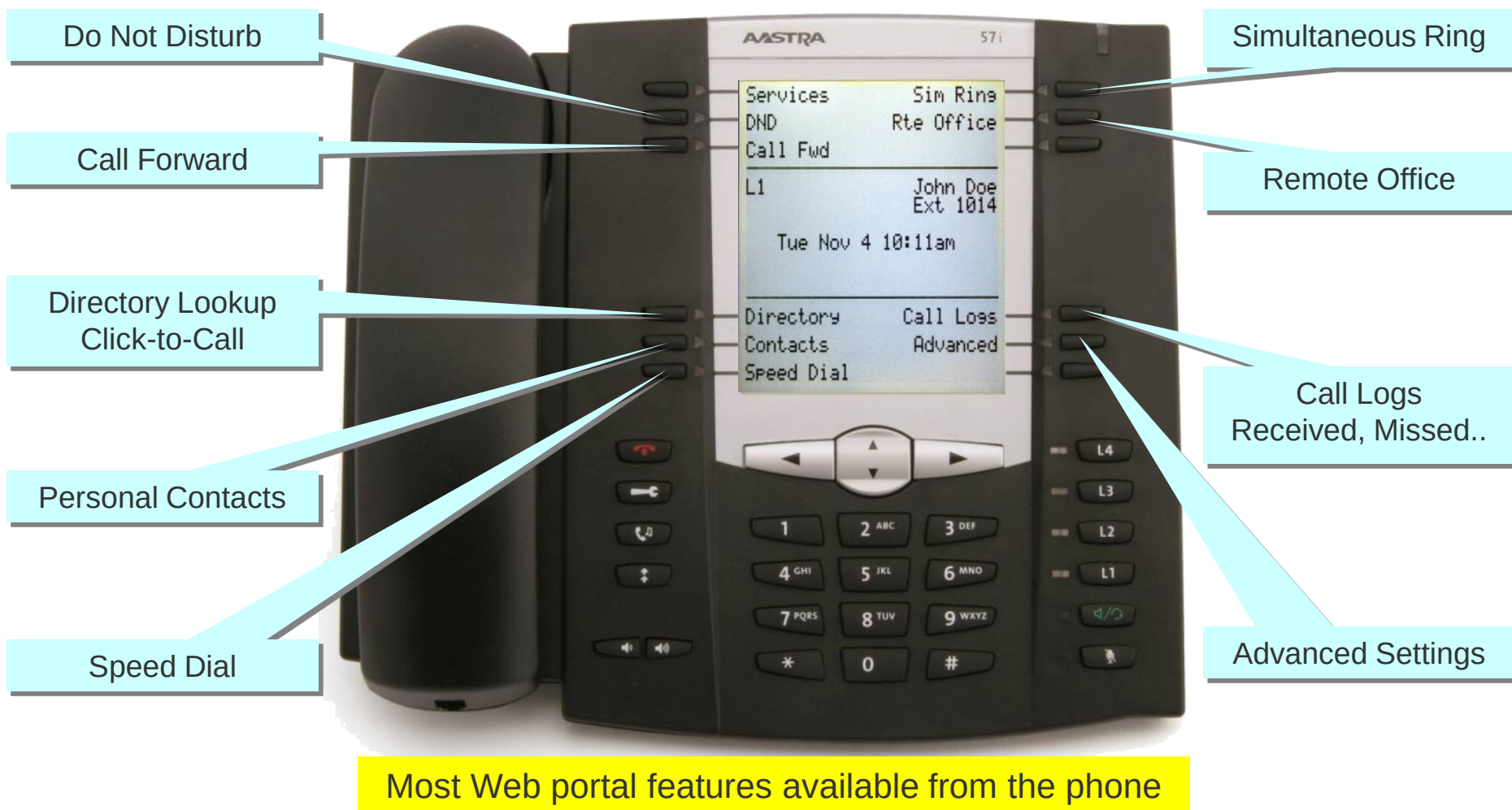
- ✧ Self-configuration
 - No more reboot with 2.2.1
- ✧ Server-side DND
 - LED status
 - BLF update
- ✧ Server-side CFWD
 - LED status
- ✧ **Find-me Follow-me**
 - LED status
 - Parameter management
 - Phone number management
- ✧ **Visual Voice mail**
 - LED status
 - Record/Play/Delete prompts
 - Other VM box control
- ✧ **Visual Parking**
 - ✧ LED status
 - Orbit displayed when parking a call
- ✧ **Meet-me manager**
- ✧ **ACD Agent**
 - Login/logout/pause
- ✧ Queue monitoring
 - Real-time statistics
- ✧ PBX directory
- ✧ Contact directory
- ✧ Server-side speed dial
 - 30 records
- ✧ **Presence**
 - Shared status
 - Notification on return
- ✧ Day/night control
 - LED status
 - All 9 indexes
- ✧ MP3 Player
- ✧ + All usual media applications
 - RSS feeds (CNN, ESPN...)
 - Horoscope,

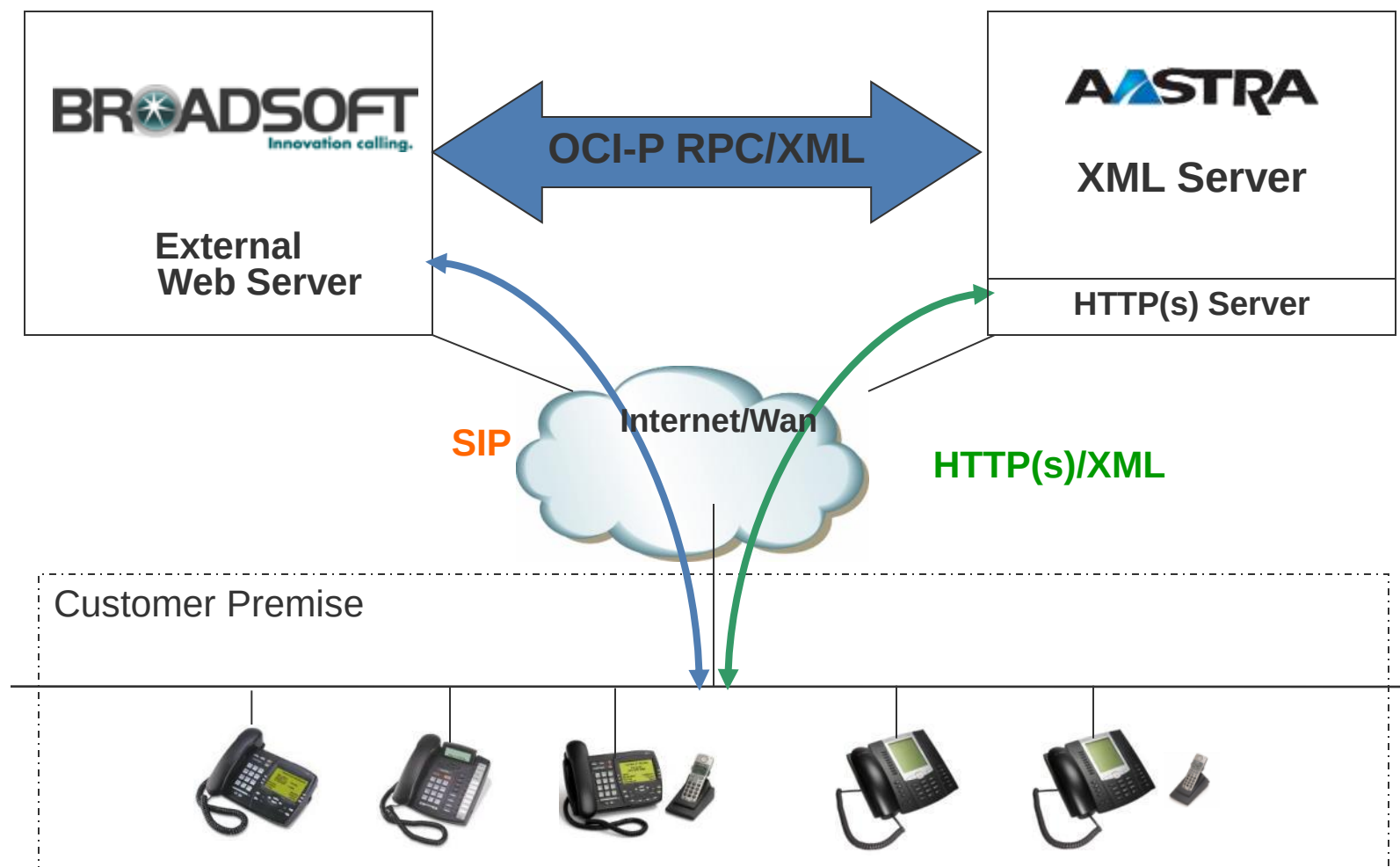
Video demo at <http://www.youtube.com/watch?v=OwhsG4BoeK8>

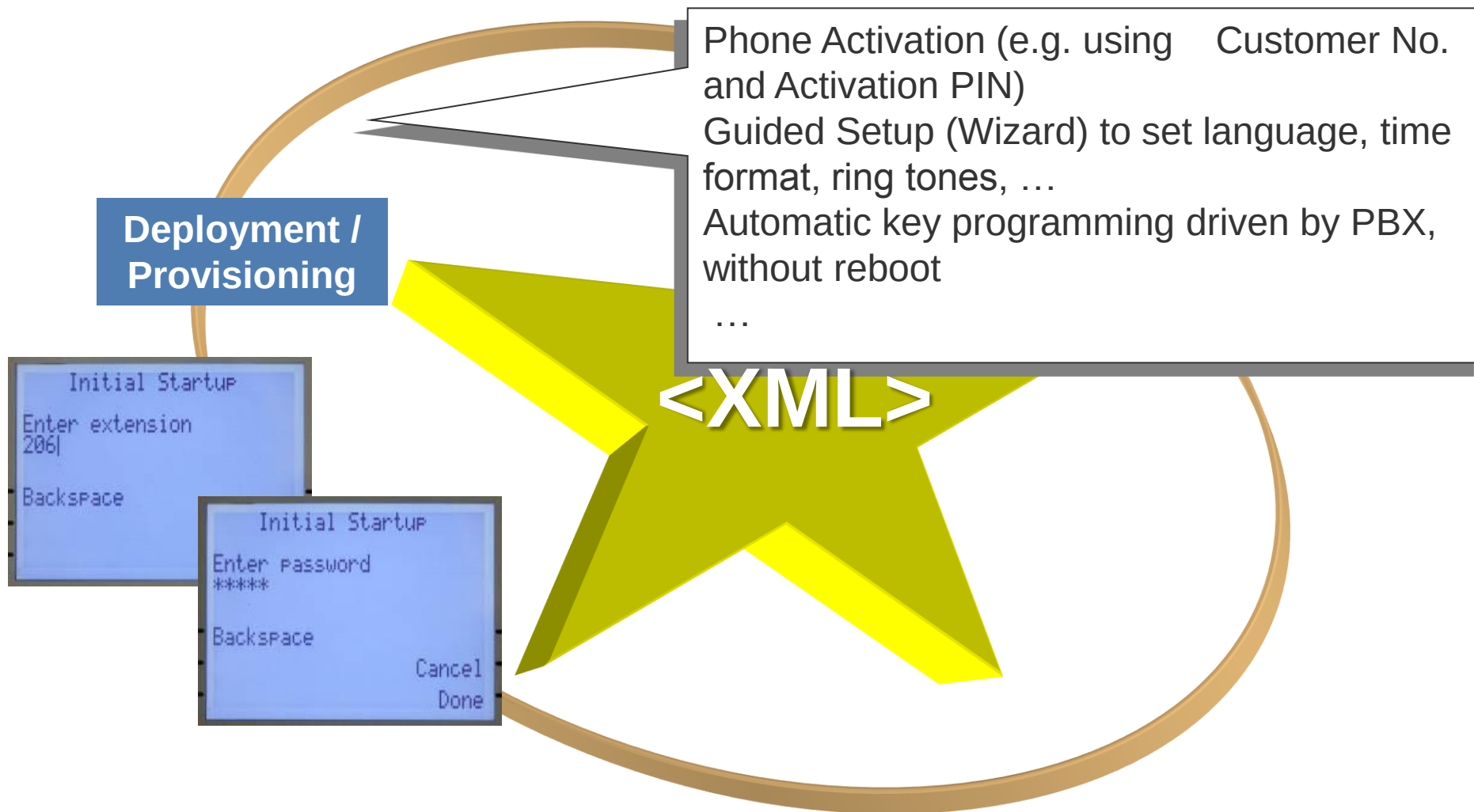
- ✧ Using Broadsoft OCI-P interface
- ✧ Available on request free of charge
 - Provided as is as Open-Source under the LGPL license
 - **NOT** supported by Aastra support
- ✧ Supported phones
 - All phones running 2.x
- ✧ Goal: offer Web portal features from the phone



Integration with BroadWorks – Telephony

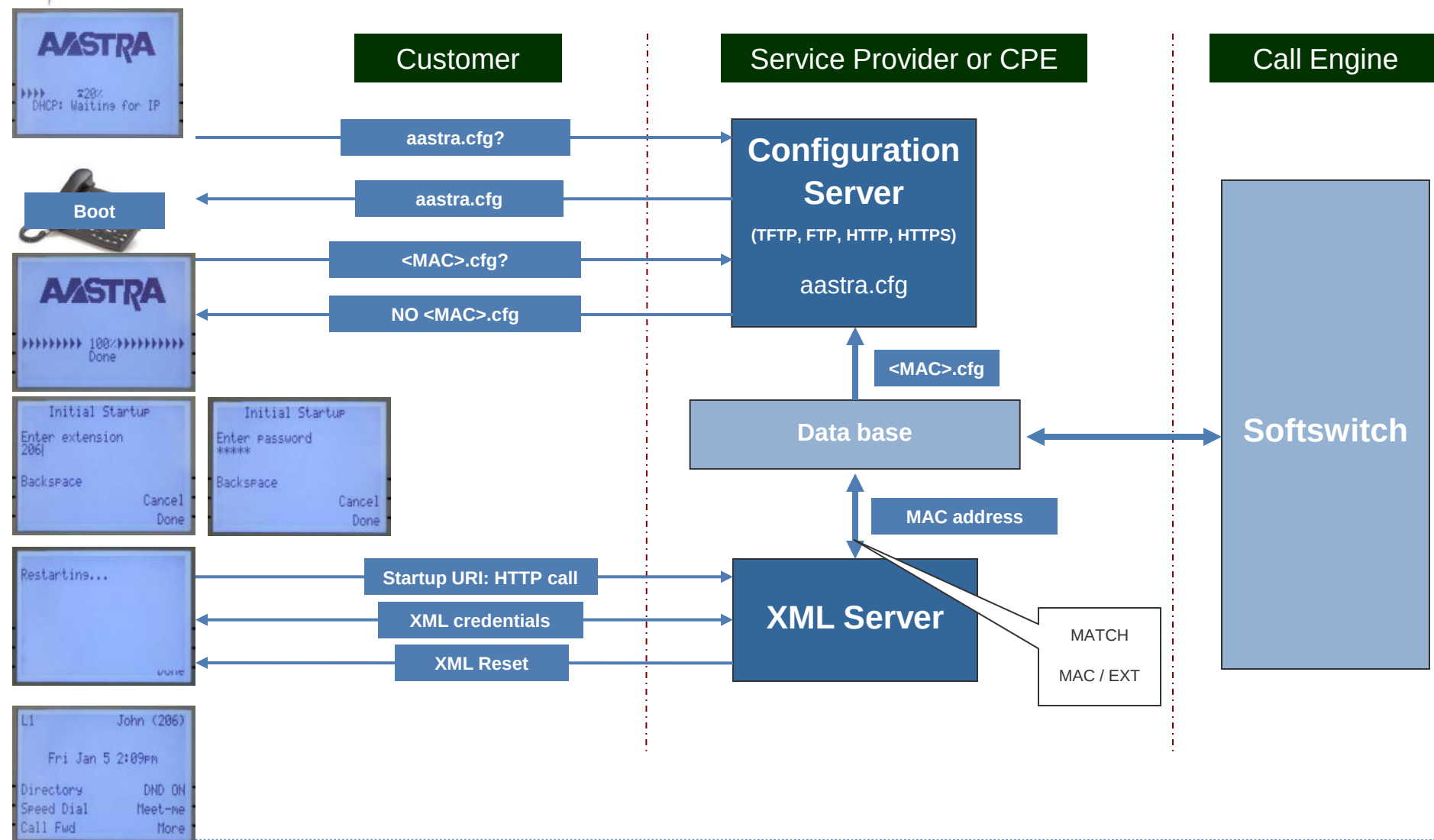


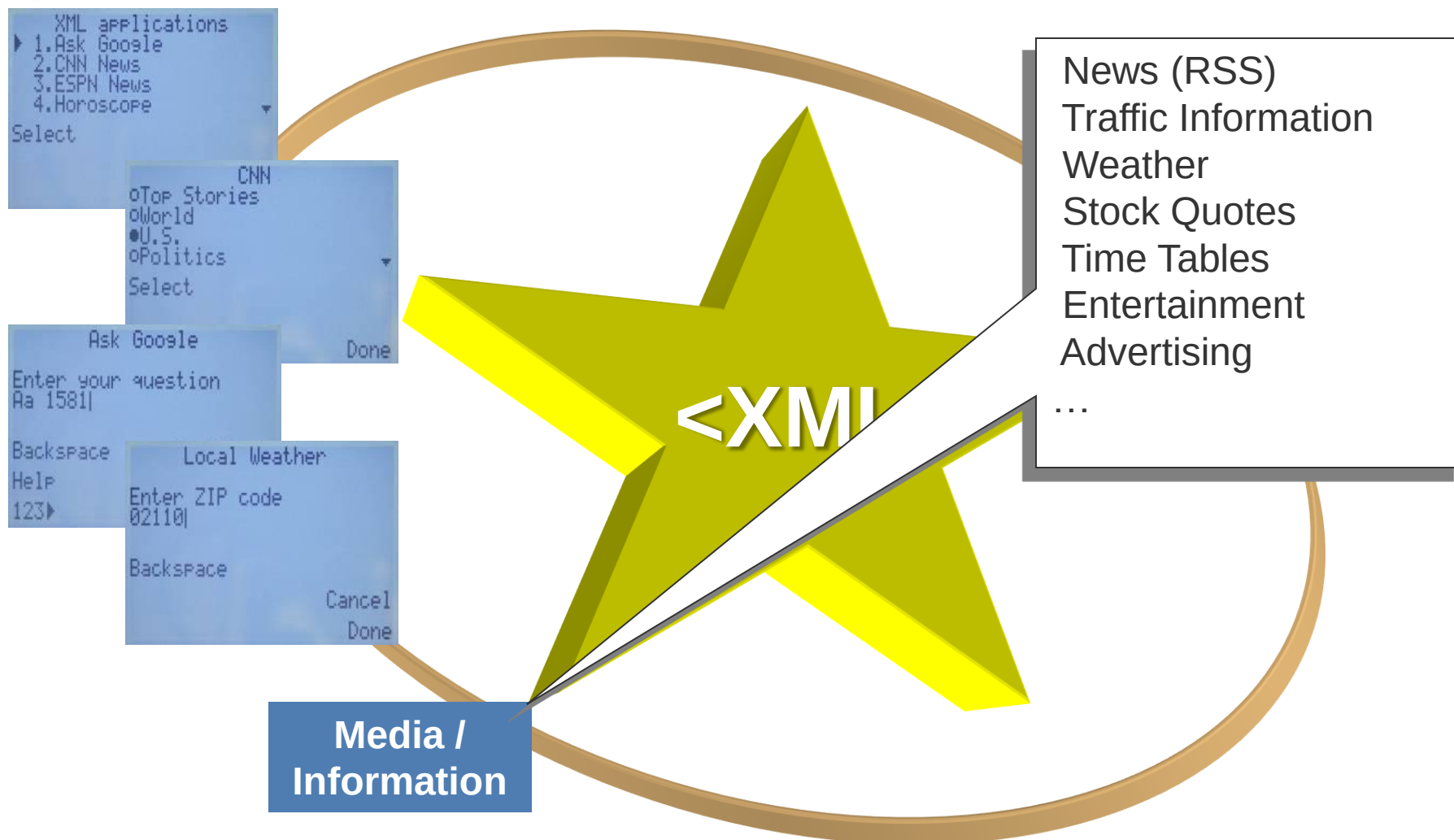




XML Self-Configuration

Phone is “drop shipped” to the site





Services



XML applications
 1. Ask Google
 2. CNN News
 3. ESPN News
 4. Horoscope
 Select
 Exit

CNN
 oTop Stories
 oWorld
 oU.S.
 oPolitics
 Select
 Done

U.S.
 oHailstorm funnels Denver
 oWayward whales closing
 oPolice: Now hanes kids
 oRetired priest denies
 Select
 Done

Retired priest denies
 role in 1968 slayings
 It's fair to say John
 Feit was surprised to
 Previous
 Next
 Done

Week ending on 05/31
 Gemini May 21-Jun 21
 Cancer Jun 22-Jul 22
 Leo Jul 23-Aug 22
 Virgo Aug 23-Sep 22
 Select
 Done

Gemini May 21-Jun 21
 All that hard work you
 have been doing lately
 needs to be put behind
 Done

World Clock (Ch-Fr)
 Ethiopia-Addis Ababa
 Fiji-Suva
 Finland-Helsinki
 France-Paris
 Select
 Previous
 Next
 Favorites
 Exit

France-Paris
 Wednesday,
 May 30 2007
 3:54:06 PM
 Back
 Exit

HR: Clock-In / Clock-Out, Vacation check

Travel / Hotel: Balance, In-Room Dining Ordering, Wake-Up, DND, Extend Stay

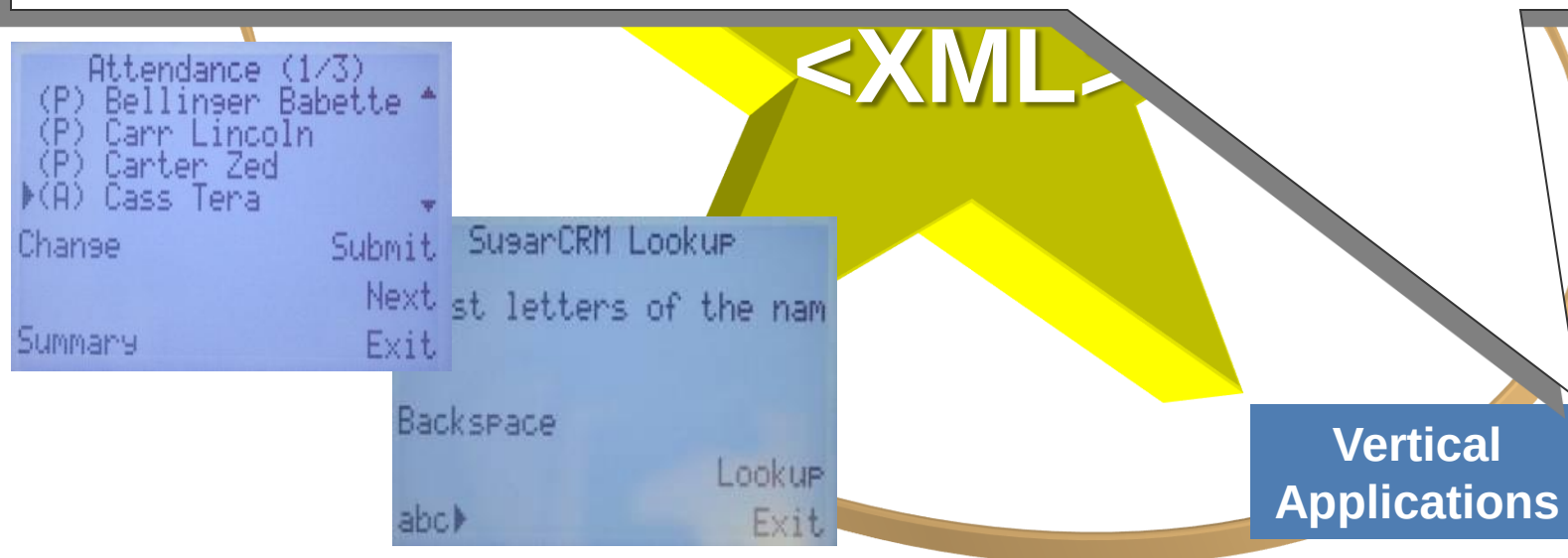
Health Care / Hospital: Choose meals, Balance

Education: Attendance, Schedule Classes, Parent Contact Info

Service Provider: Customer Service, FAQs, Help&Hints, Service Subscription

Call Center: Agent Login/Logout, Customer Information, Wrap-Up

...



- ✧ Teacher arrives in the class room
- ✧ She signs in, using the Aastra IP telephone



- ✧ Teacher takes attendance.
- ✧ Marking the status of Students as she goes.



- ✧ Once complete the Report is summarized (note 38/0/1)...
- ✧ ...then submitted to the Administration office.



Vertical Application - Choose meals

✧ Customer can order a meal from the terminal

- Starter
- Main dish
- Dessert

✧ An order confirmation with its cost is displayed



Emergency broadcast
Instant Messaging, SMS
Building Control: Door Opener, Light switch
Games
...

Misc

<XML>

FLORIDA ALERT SYSTEM

Emergency Activated

CONFIRM
CONFIRM
CONFIRM

CONFIRM
CONFIRM
CONFIRM

Back in Black
by AC/DC
Album: Back in Black
Year: 1980

Play

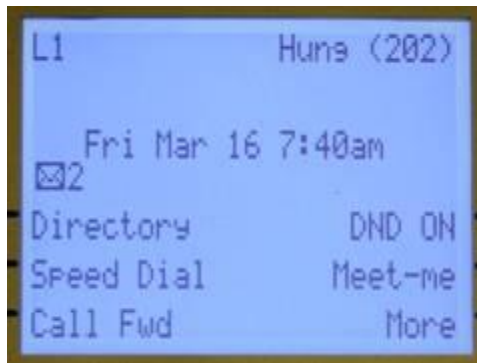
Back

Exit

1-5 H/R
Roll
Score 0000
Round 01 Roll 1

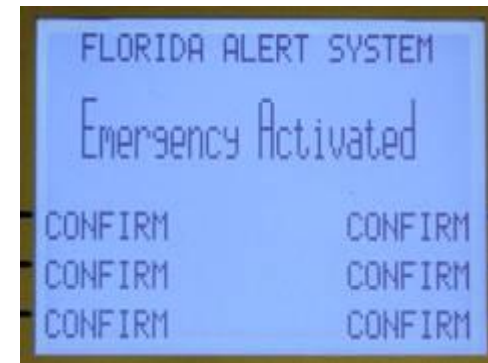
Roll New Game
Enter Hi-Score
Status Exit

- ✧ Whether small or large, every education institution is faced with the reality of Disaster Planning.
 - With Telephones in every classroom the phones can both **RECEIVE** and **SEND** emergency information.
- ✧ Centralized Activation; informing all IP phones an emergency is in affect.



Regular idle Screen

**Emergency Mode
can be activated
by Administration
or a Control Center**



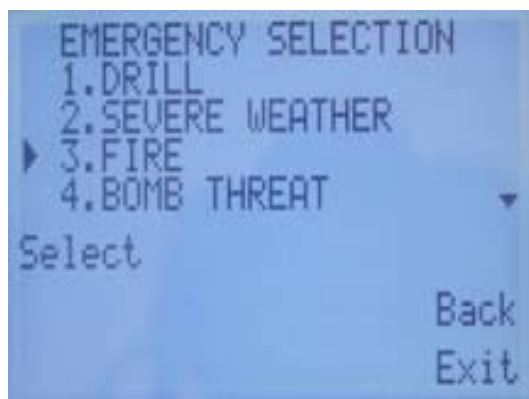
Emergency Notification

- ★ Emergency Mode can customized button layout until Emergency is cleared.





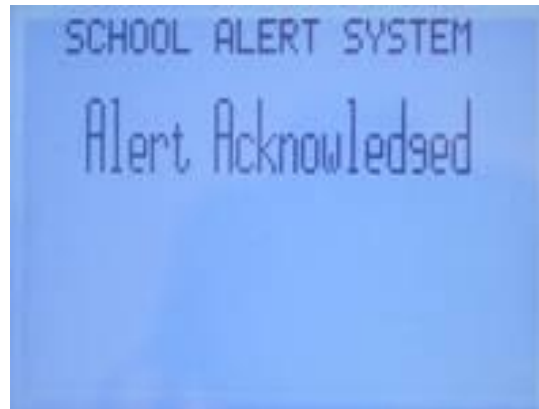
**Administration
pushes Alert
Message to all
Phones**



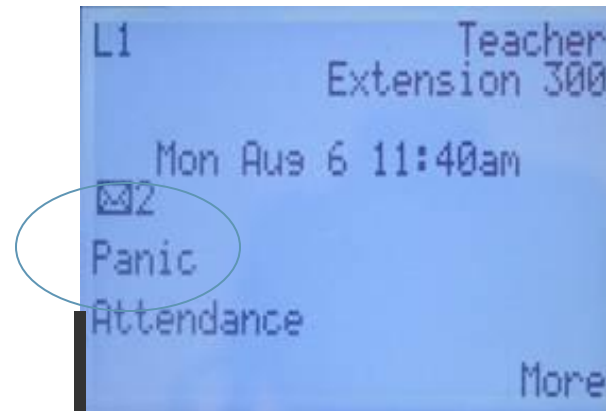
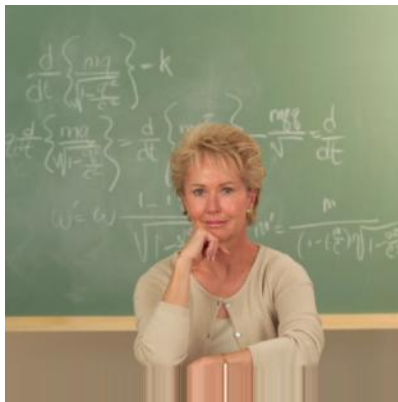
School Administration initiates a Fire Alert to all Classrooms.



“Confirming” the Alert indication provides Administration with a positive indication of the status of the class room.



The Phone Remains in Active Mode until cancelled.



Teachers can also initiate a Panic condition

- ✧ Thanks to the Aastra XML API,
 - the SIP phone becomes a true converged IP device for voice and data applications
 - the integration of the phone into business processes and applications is now possible
 - the integration with the voice call control enhances dramatically user experience and provides new features not available with just the SIP protocol

- ✧ Easy to use for development and to implement
 - Comes with a very detailed XML SDK
 - Technical training available
 - Web application development skills needed
 - Simple configuration
 - Free applications and sample source codes provided by Aastra

- ✧ European Contest to promote development of XML applications
- ✧ From the 15th to the 30th of October 2010
- ✧ 4 categories
 - Best Business application
 - Best Lifestyle/Fun application
 - Best Telephony related application
 - Best Social Networking & Web 2.0 application
- ✧ Sign on to participate
 - <http://support.aastra.fr/XMLContest/>



**For a demo, come to meet us on
our booth **A7****